

MORAL INJURY AND SUICIDE RISK

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Suicide negatively impacts all aspects of military service from recruitment to retention as well as the physical and spiritual well-being of units, military members, family, and friends. Moreover, it denies the military the current and future benefits derived from the service of an individual in whom the military has invested significant resources. To improve suicide prevention outcomes in the military and veteran communities, the impact of moral injury—separate from posttraumatic stress disorder—on suicidal ideation must be more clearly understood. The interpersonal theory of suicide can assist the military as it develops mechanisms to address the effect of moral injury on suicidal ideation among the active-duty and veteran populations.

The construct of moral injury has been used to conceptualize the behavior of military service members and veterans who struggle to reconcile their military or combat-related experiences. The distress resulting from exposure to morally and ethically questionable actions in war and warfare has been touted as justified for the cause. Yet since the Nuremberg trials, when military members were first held accountable for not challenging orders that should have been considered morally questionable, the argument that being ordered to do something by a higher authority provides the moral justification for an action has been formally challenged.¹ For service members, the inability to change past distressing behavior sometimes leads to feelings of guilt, shame, regret, and suicidal ideation.

In some cultures, suicide historically fit into the military mindset as a means of last resort to deny an enemy intelligence or as a way to avoid the dishonor of capture or defeat. But in the European tradition since at least the Renaissance, suicide has been rejected as a useful strategy to achieve any military end.

In the last century, suicide incidence rates in the military have tended to rise and fall in step with major operational activities, from a high of 118 per 100,000 per year just prior to the Spanish-American War to a low of 5 per 100,000 per year at the close

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1. Anthony J. Ghiotto, "The Presidential Coup," *Buffalo Law Review* 70, no. 1 (2022): 369.

of World War II.² When adjusting for age and gender, suicide rates amongst active-duty US Army personnel over the last century tend to parallel the general population, but in a more dramatic fashion. Suicide rates increasing in US civilian males also means that US Army males have a sharper increase in suicide rates.³

In the modern era, military leaders recognize that suicide, at the very least and apart from the personal and familial costs, denies the organization the present and future services of someone in whom a generally significant investment has been made.⁴ The rise in overall US suicide rates since the late 1990s also meant the military suicide rate increased. Coincidentally, and possibly as a response to this increase, moral injury has been a research topic of increasing interest to those assessing the veteran and military communities.⁵

Yet there is still no consensus on an operational definition for moral injury. Moral injury has been defined in various ways, but for the purposes of this article, it is defined as the distress resulting from an event that violates or distorts one's morals or ethics or challenges fundamentally held beliefs on how the world works or how certain groups or individuals should be treated.⁶ It is worth noting that such experiences do not necessarily need to involve death or threat of death to cause moral injury.

As moral injury is a relatively new concept as a stand-alone research topic, some effort to distinguish the rate of moral injuries, as opposed to other forms of distress that could contribute to suicides, needs to be made so that data on the relative occurrences can be determined. While moral injury is briefly explained here, this article does not delve deeply into the concept's history and evolution into today's many potential applications. This article will address suicide risk and moral injury, including suicide risk factors among personnel exposed to moral injury and posttraumatic stress disorder (PTSD) events. The article will also consider current treatments, limitations, and future military population-focused research recommendations.

Moral Injury and PTSD

Similarities and Differences

To study moral injury and its importance to the military community, similarities as well as differences between moral injury and PTSD must be distinguished. While

2. Steven Davis, "The History of Suicide in the Military" (panel presentation, Society of Military History Conference, San Diego, CA, March 25, 2023).

3. Jeffrey Allen Smith et al., "A Historical Comparison of US Army & US Civilian Suicide Rates, 1900–2020," *Psychiatry Research* 323 (2023).

4. Davis, "History of Suicide."

5. Craig J. Bryan et al., "Measuring Moral Injury: Psychometric Properties of the Moral Injury Events Scale in Two Military Samples," *Assessment* 23, no. 5 (2016).

6. Brett T. Litz et al., "Moral Injury and Moral Repair in War Veterans: A Preliminary Model and Intervention Strategy," *Clinical Psychology Review* 29, no. 8 (2009).

moral injury and PTSD can have similar and even overlapping symptoms, each has unique features, especially in relationship to suicide risk factors.

According to one study, “A traumatic event in which an individual commits, fails to prevent, or witnesses an act that violates his or her ethical and moral beliefs can be considered a potentially morally injurious event (PMIE).”⁷ Although moral injury was first attributed to war-related trauma, it is no longer limited to the military, as research has applied the same moral injury constructs to other populations experiencing traumatic events.⁸ Experiencing such an event can increase the likelihood of developing symptoms associated with moral injury, but it does not mean one will. Similarly, experiencing a traumatic stressor event may increase the likelihood of developing PTSD-associated symptoms, but this does not necessarily mean it will definitely occur, given differences and protective factors.⁹

Posttraumatic stress disorder can present through different clusters of symptoms as a response to a traumatic event causing significant clinical distress to the individual. Such symptoms are the result of a traumatic event, either directly experienced or witnessed, in which the individual is threatened by actual or threat of death, serious injury, or violation of physical integrity or safety.¹⁰

The symptoms of PTSD generally include flashbacks, avoidance, and negative cognitions and mood, which can present as sleep disturbances and hypervigilance. As such, PTSD is more greatly characterized by a “startle” response.¹¹ The most recent update to diagnostic criteria used by mental health providers includes additions to PTSD symptoms such as persistent negative emotional states including guilt and shame.¹² Even so, fear and anxiety responses are typically attributed to PTSD, while moral injury is typically characterized by feelings of guilt and shame.¹³ These guilt and shame responses include social alienation, anhedonia, lasting anger, an inability to trust others, and feeling unworthy, sorrowful, bitter, unforgiveable, or permanently damaged.¹⁴

Both PTSD and moral injury can be instigated by traumatic stressor events and appear with similar clinical presentations. Because PTSD and moral injury share a number of symptoms, it can be difficult to distinguish between the two when a client

7. Litz et al., “Moral Injury,” 697.

8. Brandon J. Griffin et al., “Moral Injury: An Integrative Review,” *Journal of Traumatic Stress* 32, no. 3 (2019): 356.

9. Yossi Levi-Belz, Sharon Shemesh, and Gadi Zerach, “Moral Injury and Suicide Ideation among Combat Veterans: The Moderating Role of Self-Disclosure,” *Crisis: The Journal of Crisis Intervention and Suicide Prevention* 44, no. 3 (2023): 203–4.

10. American Psychiatric Association (APA), *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. (DSM-5) (Washington, DC: APA Publishing, 2013).

11. Craig J. Bryan et al., “Moral Injury, Posttraumatic Stress Disorder, and Suicidal Behavior among National Guard Personnel,” *Psychological Trauma: Theory, Research, Practice, and Policy* 10, no. 1 (2018): 37.

12. APA, DSM-5.

13. Nicole A. Hall et al., “Moral Injury, Mental Health and Behavioral Health Outcomes: A Systematic Review of the Literature,” *Clinical Psychology & Psychotherapy* 29, no. 1 (2022).

14. Bryan et al., “National Guard,” 41–42.

presents with these shared symptoms, which include anger, depression, anxiety, substance abuse, insomnia, and nightmares.

Yet, clients with PTSD often present with a startle reflex, memory loss, and flashbacks, which make it possible to diagnose them with PTSD as opposed to moral injury on this basis, even if they display one or more of the shared symptoms. Clients may be diagnosed with moral injury if, instead of the PTSD-specific symptoms, they display other moral injury symptoms, such as anhedonia, grief, guilt, shame, social alienation, lack of trust, and difficulty with forgiveness.¹⁵

Subscales

The most accepted working definition of moral injury breaks down morally injurious events by the types of injury and the perpetrator of the action. The Moral Injury Events Scale measures two subscales of moral injury: Transgressions by Self and Others and Betrayal.¹⁶ This two-factor scale scores the extent to which potentially traumatic events violate the ethical and moral beliefs of the individual.

Additional research has found that the Transgressions scale, further divided, has unique relationships to suicide risk and clinical interventions; therefore the measurement subscales are now accepted as: Transgressions by Self (Transgressions-Self), Transgressions by Others (Transgressions-Others), and Betrayal.¹⁷ The addition of the third subscale has evolved the understanding of the effects of transgressions by self and transgressions by others independent of each other. Therefore, moral injury in terms of those three subscales and their relationships to suicide risk will be addressed.

All three subscales of moral injury have been associated with particular psychological distresses similar to those displayed by people demonstrating PTSD-associated symptoms. The Transgressions-Others subscale refers to experiences that are witnessed or learned about by the individual but perpetrated by some other person. The Transgressions-Self subscale measures distress resulting from one's own direct actions, or lack thereof, related to a morally injurious event. Events considered on the Betrayal subscale of moral injury can include perceived betrayal or deception, especially by fellow service members or by military leadership.¹⁸

Assessing each of the moral injury subscales individually is important to further inform treatment and understanding, as studies have indicated differing relationships between the subscales and PTSD-associated symptoms. For example, the subscales of Transgression-Others and Betrayal were associated with the PTSD symptoms of re-experiencing events, or the intrusion of traumatic or unpleasant memories into the present; the subscale of Transgressions-Self was associated with emotional numbing across

15. Bryan et al., 37, fig. 1.

16. William P. Nash et al., "Psychometric Evaluation of the Moral Injury Events Scale," *Military Medicine* 178, no. 6 (2013).

17. Bryan et al., "Measuring Moral Injury."

18. Bryan et al., 567.

samples from Army National Guard and Air Force psychiatric outpatients.¹⁹ The importance of the agent of action—self or other—was highlighted as a pivotal factor in the expression of symptoms.²⁰

Although characteristics of moral injury may overlap with PTSD characteristics, recent brain activity studies have been expanded by identifying unique activity patterns in moral injury subscales that were independent of known PTSD activity.²¹ The study found differences in brain activity levels in those with identified moral injury subscales. These results indicate those who identified with the Transgressions-Self subscale correlated a higher level of brain activity in the left inferior parietal lobule with a higher subscale score. Those who identified with Transgressions-Others and Betrayal subscales had less brain activity in that area with a higher subscale score.²²

It is noted that activity in one select neural structure should not be the only value used, as many studies look at certain networks of brain structures and their interconnectedness.²³ Nonetheless, the neurological findings on brain activity highlighted moral injury subscales as well as their similarities and differences with the brain activity expressions of PTSD symptoms. This reinforces earlier research that understanding the relationship between moral injury subscales and expressions of PTSD symptoms, even on a biological level, may have specific and unique clinical application to addressing the potential for moral injury to increase the risk of suicide.²⁴

Suicide: Risk Factors and Ideation

Despite increased attention to suicide incidence rates in the military population and implementation of various suicide prevention services and programs since 1995, suicide rates have still been increasing. The most recent data continues to indicate an increase in active-duty military suicide rates since 2015.²⁵ While the extent to which rates have increased may have been slowed by existing services and programs, taking into account potentially morally injurious events as possible factors may need to be included in additional resources to reduce these rates.

A risk factor as defined by public health is a variable (age, sex, etc.) associated with increased risk of disease, in this case suicide. Risk factors for suicide include age, gender, mental and physical illness, relationship instability, family history, previous exposure

19. Bryan et al., 567.

20. Nash et al., “Psychometric Evaluation.”

21. Delin Sun et al., “Resting-State Brain Fluctuation and Functional Connectivity Dissociate Moral Injury from Posttraumatic Stress Disorder,” *Depression & Anxiety* 36, no. 5 (January 2019): 448.

22. Sun et al., 448–49.

23. Coralie Bastin et al., “Feelings of Shame, Embarrassment and Guilt and Their Neural Correlates: A Systematic Review,” *Neuroscience & Biobehavioral Reviews* 71 (2016): 467–68.

24. Seth G. Disner et al., “Spontaneous Neural Activity Differences in Posttraumatic Stress Disorder: A Quantitative Resting-State Meta-Analysis and Fmri Validation,” *Human Brain Mapping* 39, no. 2 (2018).

25. Department of Defense (DoD), Under Secretary of Defense for Personnel and Readiness, Defense Suicide Prevention Office (DSPO), *Annual Suicide Report: Calendar Year 2020* (Washington, DC: DoD, 2021).

to suicide, a person's perceptions about suicide, previous suicide attempts, history of substance abuse, experiences of loss, childhood trauma, and access to weapons.²⁶ In contrast, protective factors are constructs that mitigate a person's desire to die and include family cohesion (including bonds with pets), extended support, access to care, restricted access to means, spirituality, good problem-solving and conflict-resolution skills, resilience, and a connection to community.²⁷

Suicidal ideation—thoughts or feelings about suicide—is one major antecedent of suicide. For that reason, identifying risk and protective factors associated with suicidal ideation among a military population remains critical.²⁸ It is important to note that just because a person presents with risk factors does not mean suicidal ideation will occur. If ideation does occur, then it is still not necessarily true that the individual will plan, prepare for, or attempt suicide. Alternatively, a person does not have to have many risk factors to be at risk for suicide; a person may have a single one, such as the loss of a loved one, but the intensity of that loss can put that person at a higher risk.

Several conditions have been recognized as significant risk factors for suicidal ideation and suicidal behavior, especially among veterans. These factors include the presence of mental disorders, particularly depression and PTSD, a history of suicide attempts, personal traits such as impulsivity, and environmental variables. Military service experience, especially stressful events such as exposure to combat, has also been found to play a significant role in suicidal ideation among military members. Far less research has addressed combat-related, potentially morally injurious events as a possible risk factor for suicidal ideation and suicidal behavior.²⁹

The theory most applicable to understanding the link between moral injury and suicide risk is the interpersonal theory of suicide introduced by Thomas Joiner in 2005, which posits there are three components of active and increased suicide risk: thwarted belongingness, perceived burdensomeness, and an acquired capability for suicide. Thwarted belongingness is a disconnection from one's community or one's core components of their identity such as family, faith, and work. This disconnection may take many forms, such as the break-up of a relationship, termination from a work position, and excommunication from one's faith. These disconnections create loneliness and a lack of meaningful relationships.³⁰

26. "Risk Factors, Protective Factors, and Warning Signs," American Foundation for Suicide Prevention (AFSP), accessed August 8, 2023, <https://afsp.org/>.

27. Christopher W. Drapeau and John L. McIntosh, "U.S.A. Suicide: 2019 Official Final Data," American Association of Suicidology, December 23, 2020, <https://suicidology.org/>; and "Suicide Data and Statistics," National Center for Injury Prevention and Control, Centers for Disease Control (CDC), last reviewed May 8, 2023, <https://www.cdc.gov/>.

28. J. John Mann, Christina A. Michel, and Randy P. Auerbach, "Improving Suicide Prevention through Evidence-Based Strategies: A Systematic Review," *American Journal of Psychiatry* 178, no. 7, (2021), <https://doi.org/>.

29. DSPO, *Annual Suicide Report*.

30. Thomas Joiner, *Why People Die by Suicide* (Cambridge, MA: Harvard University Press, 2005).

Perceived burdensomeness is judging oneself to be a liability to others, extending to the thought that others would be better off if one were dead. An acquired capability for suicide is a combination of factors, including a reduced fear of death, an increased tolerance for pain, and a repeated, numbing exposure to painful and damaging events.³¹ An individual repeatedly experiencing or exposed to painfully injurious events becomes habituated to this pain.³²

The presence of thwarted belongingness and perceived burdensomeness explains how suicidal thoughts merge into what can be conceptualized as the “suicidal zone.” An acquired capability for suicide is a necessary addition to the other components for lethal suicide attempt behavior.³³ Thwarted belongingness and perceived burdensomeness can be representative of the reason someone wants to die by suicide, or suicidal intent, while acquired capability explains who can attempt suicide or who exhibits suicidal behavior.³⁴ This conceptualization helps explain the dramatic difference in the numbers of people who report having had serious suicidal thoughts (12.3 million American adults in 2021) and those who make an attempt to end their lives (1.7 million).³⁵

Studies consistently agree that military personnel exhibiting high thwarted belongingness were at greater risk for suicidal ideation when perceived burdensomeness was also high, as well as at greater risk for suicidal behavior when an acquired capability for suicide was also additionally present.³⁶ With military populations showing higher acquired capability than civilian populations, there is a reasonable concern that the development of thwarted belongingness or perceived burdensomeness, or both, puts military personnel at greater risk for suicide.³⁷

Most studies did not differentiate between military personnel with combat experience and those without; therefore, it is informative that an acquired capability for suicide was found to be only slightly higher in combat-experienced military personnel than in noncombat-experienced military personnel.³⁸ Given a dearth of research on this topic, the relationship can only be speculated, and it is worth investigating further how the characteristics of military personnel suggest their increase of acquired capability for suicide.

31. Carol Chu et al., “Non-Suicidal Self-Injury and Suicidal Thoughts and Behaviors: A Study of the Explanatory Roles of the Interpersonal Theory Variables among Military Service Members and Veterans,” *Journal of Consulting & Clinical Psychology* 86, no. 1 (January 2018): 64.

32. Craig J. Bryan et al., “Combat Experience and the Acquired Capability for Suicide,” *Journal of Clinical Psychology* 66, no. 10 (2010): 1045.

33. Joiner, *Die by Suicide*.

34. Kimberly A. Van Orden et al., “The Interpersonal Theory of Suicide,” *Psychological Review* 117, no. 2 (2010): 575.

35. “Provisional Suicide Deaths in the United States, 2022,” press release, CDC, August 10, 2023, <https://www.cdc.gov/>.

36. Caroline Silva et al., “Evidence for the Propositions of the Interpersonal Theory of Suicide among a Military Sample,” *Journal of Clinical Psychology* 73, no. 6 (2017): 676.

37. Bryan et al., “National Guard Personnel,” 36.

38. Bryan et al., “Combat Experience,” 1053–54.

Moral Injury and Joiner's Theory

Results of mounting research support the interpersonal theory of suicide with military populations. The question then becomes how thwarted belongingness, perceived burdensomeness, and an acquired capability for suicide relates to moral injury and potentially morally injurious events. Of particular concern in a military setting is the increase in thwarted belongingness when Betrayal PMIEs are experienced, essentially undercutting carefully contrived military bonds, particularly in a deployed population.³⁹

For example, military personnel perceiving betrayal by superiors may feel a lack of inclusion in regularly experienced military bonds (thwarted belongingness) and may then may feel significant guilt and shame (perceived burdensomeness) for the PMIE experienced, resulting in suicidal ideation.⁴⁰ This suggests the pathway to suicidal risk may be higher for military betrayal experiences.⁴¹

Military personnel experiencing PMIEs specifically through transgressions-by-self experience prolonged feelings of guilt, which can result in withdrawal from social networks in an attempt to protect or shield themselves so as to not to taint valued others with their moral transgressions.⁴² In turn, not allowing oneself to be known by others or actively distancing oneself from others is related to significantly higher levels of suicidal ideation, as this parallels the constructs of thwarted belongingness and perceived burdensomeness. Studies have consistently found more severe suicidal ideation in individuals experiencing transgressions-by-self.⁴³

Clearly, there is a demonstrable connection between moral injury and suicidal behavior and risk. The goal in linking moral injury scales, PTSD symptoms, and constructs of Joiner's theory about these ideas is to highlight their relationship to each other and their independent relationship to suicidal behavior. Although research has correlated moral injury, PTSD, and suicide risk, a direct causation between moral injury and suicide risk is more difficult to establish, as it is with many factors that accompany suicidology research. Joiner's theory has provided a strong connection, which has been validated over several studies, and thus warrants further examination in the effort to reduce suicidality among military members.

39. Rachel L. Martin et al., "The Impact of Aggression on the Relationship between Betrayal and Belongingness among US Military Personnel," *Military Psychology* 29, no. 4 (2017): 279–80.

40. Mary Oglesby Shapiro et al., "Moral Injury and Suicidal Ideation among Female National Guard Members: Indirect Effects of Perceived Burdensomeness and Thwarted Belongingness," *Traumatology* (2022): 4–5.

41. Martin et al., "Impact of Aggression," 278–80.

42. Litz et al., "Moral Injury."

43. Levi-Belz et al., "Suicide Ideation," 203; and Christopher D. Corona et al., "Meaning in Life Moderates the Association between Morally Injurious Experiences and Suicide Ideation among US Combat Veterans: Results from the National Health and Resilience in Veterans Study," *Psychological Trauma* 11, no. 6 (2019): 618.

Moral Injury and Suicidality

The general belief is that military populations should expect and anticipate the terrors of combat, especially during wartime deployments, which may include situations such as witnessing killing or killing people themselves. Yet some military personnel will face psychosocial distress after witnessing those experiences while others will not.⁴⁴ Moral injury may also be difficult for the individual to understand as military personnel are aware that in times of war some moral violations will occur and are justified for the greater good, even though such violations may not align with personal moral guidelines.⁴⁵

The ability not only to recognize moral injury in a clinical setting but also to effectively consider its impact and resulting impairment specific to the individual's experiences is essential.⁴⁶ Due to the nature of suicide risk related to moral injury, mental health professionals working with the military population must be aware of moral injury as a unique conflict which may require additional or varied treatment.⁴⁷ Clinicians must also consider that despite the efforts across the military to encourage help-seeking, many members continue to struggle in silence. Some service members, particularly those with special security clearances, may remain afraid of the negative impact that seeking support may have on their careers, making it even more challenging to identify those experiencing suicidal risk due to moral injury.⁴⁸

Clinically, crossover presentations of PTSD and moral injury can also further reveal suicide risk. As previously indicated, a PTSD diagnosis is not required to treat military personnel with moral injury, but comorbidity is common, and clinical providers can assist with better targeted treatment plans. When addressing moral injury subscales, presentation patterns have been found to correspond to PTSD-associated symptoms. Transgressions-by-self are more associated with feelings of hopelessness, pessimism, and emotional numbing, while betrayal is associated with more intense anger.⁴⁹ Increased severity in PTSD symptoms also increased the risk of suicide attempts, but only when moral injury severity increased as well.⁵⁰ All these factors affect the assessment of suicide risk and the selection of a treatment option that is both appropriate to the situation and likely to be effective.

44. Corona et al., "Meaning in Life," 614.

45. Griffin et al., "Integrative Review," 354–56.

46. Hall, "Mental Health," 102.

47. Griffin et al., "Integrative Review," 356–57.

48. Viktoria Kantor, Matthias Knefel, and Brigitte Lueger-Schuster, "Perceived Barriers and Facilitators of Mental Health Service Utilization in Adult Trauma Survivors: A Systematic Review," *Clinical Psychology Review* 52 (2017).

49. Bryan et al., "Measuring Moral Injury," 568.

50. Bryan et al., "National Guard Personnel," 41; and Kimber J. Parry et al., "Impact of Moral Injury and Posttraumatic Stress Disorder on Health Care Utilization and Suicidality in Rural and Urban Veterans," *Journal of Traumatic Stress* 36, no. 1 (2023): 123–25, <https://doi.org/>.

Treatments

A comprehensive review of treatments used for moral injury is not within the purview of this article. Since there is significant overlap in the symptomatic expression of PTSD and moral injury, the following three clinically significant treatments for PTSD among military and veteran populations are more widely used in response to both: cognitive processing therapy (CPT), prolonged exposure, and collaborative assessment and management of suicidality (CAMS).⁵¹ While these identified treatments are aimed at PTSD symptom reduction, clinicians may also recommend a preparatory session to encourage buy-in from skeptical military personnel undergoing treatment prior to more intensive, trauma-focused, evidence-based therapies.⁵²

Due to the unique nature of moral injury, some have argued new and novel treatments need to be developed specifically for moral injury, as opposed to using existing PTSD treatments. Yet empirically supported PTSD treatments such as cognitive-processing therapy with an emphasis on the integration of moral injury constructs have been effective in addressing the needs of those who may have also experienced a moral injury in addition to PTSD-inducing events.⁵³ Notably, a statistically significant reduction in guilt and shame has been shown in numerous therapeutic interventions. A focus on those treatments or interventions that have been able to establish a clinical significance through research trials is detailed below.⁵⁴

Cognitive-Processing Therapy

Cognitive-processing therapy, a specific type of cognitive behavioral therapy, has been one of the most-used therapeutic treatments in research comparisons and is also one of the most recommended for use in patients with both PTSD- and moral injury-associated symptoms. This therapy, which grants patients the tools to recognize and challenge counterproductive thoughts related to trauma before modifying their response, can be provided on an individual basis or in a group therapy setting and typically consists of 12 weekly 60-minute sessions.⁵⁵ Studies have repeatedly demonstrated improvements in PTSD symptoms relating to emotional regulation difficulties when using CPT as treatment.⁵⁶

51. C. S. Rosen et al., "A Review of Studies on the System-Wide Implementation of Evidence-Based Psychotherapies for Posttraumatic Stress Disorder in the Veterans Health Administration," *Administration and Policy in Mental Health and Mental Health Services Research* 43 (2016).

52. Eric A. Dedert et al., "Clinical Effectiveness Study of a Treatment to Prepare for Trauma-Focused Evidence-Based Psychotherapies at a Veterans Affairs Specialty Posttraumatic Stress Disorder Clinic," *Psychological Services* 18, no. 4 (2021): 651.

53. Marek S. Kopacz et al., "How Meaningful is Meaning-making?," *New Ideas in Psychology* 54 (2019).

54. Griffin et al., "Integrative Review," 354–58.

55. Dedert et al., "Clinical Effectiveness Study," 651.

56. Philippe Shnaider et al., "The Relationship between Emotion Regulation Difficulties and PTSD Outcomes during Group Cognitive Processing Therapy for PTSD," *Psychological Services* 19, no. 4 (2022): 751.

Prolonged Exposure

Another evidence-based treatment used for PTSD is prolonged exposure, which exposes the individual to reminders or memories of their traumatic experiences with support from a clinician to increase the person's tolerance for the experience.⁵⁷ Overall, patients report clinically significant reduction in severity of symptoms as well as increased global satisfaction. Similar to CPT, prolonged exposure is typically provided through outpatient, weekly, 60- to 90-minute sessions, although a more intensive format shortens the time between sessions.⁵⁸

Collaborative Assessment and Management of Suicidality (CAMS)

This suicide-specific treatment approach is well established, with over 30 years of rigorous study. A client and a clinician work together to keep the patient stable, ideally in outpatient therapy. The approach identifies the drivers that compel the client to want to take their life. The empirical support for CAMS in the treatment of suicide has been steadily growing over the past three decades. It is considered to be well supported as a clinical intervention for suicidal ideation and is proven to reduce suicidal ideation in as few as six sessions with a trained therapist.⁵⁹ At this time, one CAMS study currently in progress specifically includes an examination of the potential impact and responsiveness of moral injury as one of the drivers of suicide within a veteran population.⁶⁰

Limitations

Future recommendations for the advancement of moral injury research are echoed in many existing studies, which seek a better understanding of the topic. Yet one main limitation of studying, assessing, and treating moral injury is the lack of overall agreement on how the term moral injury is considered and defined. Although definitions in the literature are interrelated, this lack of consistency of operational definitions presents an issue when comparing prevalence and effectiveness of treatment, as it is unclear if the same constructs are being assessed.⁶¹

57. Andrew M. Sherrill et al., "Perceived Benefits and Drawbacks of Massed Prolonged Exposure: A Qualitative Thematic Analysis of Reactions from Treatment Completers," *Psychological Trauma* 14, no. 5 (2022): 862.

58. Sherrill et al., 862.

59. Joshua K. Swift, Wilson T. Trusty, and Elizabeth A. Penix, "The Effectiveness of the Collaborative Assessment and Management of Suicidality (CAMS) Compared to Alternative Treatment Conditions: A Meta-Analysis," *Suicide and Life-Threatening Behavior* 51, no. 5 (2021).

60. David Jobes (professor, associate director of clinical training, Catholic University of America), in discussion with the authors, April 12, 2020.

61. Sonya B. Norman et al., "Moral Injury among US Combat Veterans with and without PTSD and Depression," *Journal of Psychiatric Research* 154 (2022).

Recommendations

Since moral injury is not currently a separate diagnosis or diagnostic element of PTSD, its clinical significance comes from the health outcomes it is associated with, including mental, spiritual, and physical difficulties. Suicide is among those outcomes which have been closely tied to each of the three moral injury subscales. This, first and foremost, identifies the need to provide a unified and operational definition of moral injury on which to further base research.

Likewise, the components of the interpersonal theory of suicide—thwarted belongingness, perceived burdensomeness, and acquired capability for suicide—have been associated with moral injury subscale constructs, that is Transgressions-Self, Transgressions-Others, and Betrayal. More research is needed to understand these dynamic relationships, especially given how these relationships interact with suicidal intent and risk.⁶²

As moral injury has been shown to be closely associated with PTSD in terms of clinical presentation, the recommended treatments have been similar as well. Unfortunately, there is a lack of literature on the efficacy of treatment of moral injury independent of PTSD indicators.⁶³ It is important to consider that evidence-based treatments, especially those highlighted in this article, were designed for PTSD treatment but have been shown effective for those with PTSD and high scores on moral injury subscales.⁶⁴ As previously discussed, there are nuances to moral injury that have not yet been taken into account when researching treatments specific to the overall moral injury and potentially morally injurious events, as well as further research on special moral injury subscales.

Furthermore, adequately responding to the need for resources and support for moral injury by itself is insufficient to implement a moral injury response. The increased prevalence of moral injury in military personnel parallels the push for effective suicide prevention training at a time when suicide rates are climbing, specifically for military members. Unfortunately, the military's heavy reliance on pro forma training may meet some listed requirements, but this training is not effective nor does it provide actual solutions. Thus, training that includes updated course content tailored to particular military audiences may be needed.⁶⁵ Until the Department of Defense recognizes moral injury as a possible contributing risk factor for suicide, training and resources will continue to lag.

Although this article does not specify the role of religious or spiritual constructs in moral injury, there is a separate area of research that specifically focuses on the violation of moral identity through a religious lens. It is important to note that although

62. Martin et al., "Impact of Aggression," 280.

63. Norman et al., "Moral Injury."

64. Griffin et al., "Integrative Review," 356.

65. DoD, Suicide Prevention and Response Independent Review Committee, *Preventing Suicide in the U.S. Military: Recommendations from the Suicide Prevention and Response Independent Review Committee* (Washington, DC: DoD, 2022), recommendation 4.1.

religious or spiritual constructs may influence an individual service member's moral identity, it has not been found to be a significant protective factor in terms of moral injury among veteran populations.⁶⁶

Another limitation to identifying moral injury is the population which is arguably most affected by it. Studies focusing on one branch of the military versus another may yield different results. For example, Army National Guard members must coexist in civilian and military life simultaneously. This can inhibit fully embracing a reliance on military bonds formed among deployed or full-time personnel, which can then result in increased thwarted belongingness.⁶⁷ Additionally, the presentation of moral injury as shame, guilt, and betrayal from superiors can discourage military personnel from seeking available services, especially if the moral injury is associated with a leadership failure.⁶⁸

The scale of betrayal in moral injury specifically calls into question the essence of the military system, which relies on life-or-death camaraderie. Toxic leadership has recently been identified as a problem within the ranks, and several recent recommendations have been issued to research and explore avenues of identifying good leadership as well as predicting abusive leadership behavior.⁶⁹ Although neither moral injury nor feelings of betrayal are listed specifically as reasons for these recommendations, the literature highlights that military personnel who report higher rates of feelings of betrayal also report higher levels of suicidal intent and depression.⁷⁰

Conclusion

Moral injury is not exclusively a military construct; however, it is predominant in military populations where an individual experiences a violation of moral or ethical values or both that is difficult to comprehend. Although the presentation and treatment options may overlap with PTSD-associated symptoms, research has indicated moral injury overall, as well as its three subscales, have a unique place for consideration when it comes to suicide risk.

The interpersonal theory of suicide best explains what components are necessary for suicidal behavior. The expression of these components directly through moral injury subscales links potentially morally injurious events to suicide risk independent of PTSD. Although the need to recognize and treat moral injury in military populations has been gaining more attention since the late 1990s, the concept of moral injury has not made its way into any official prevention guide.

Moral injury is a risk factor for suicide, which is only recently coming to light. The Department of Defense needs to work with other federal and civilian health organizations

66. Corona et al., "Meaning in Life," 617.

67. Martin et al., "Impact of Aggression," 278.

68. Marie-Louise Sharp et al., "Stigma as a Barrier to Seeking Health Care among Military Personnel with Mental Health Problems," *Epidemiologic Reviews* 37, no. 1 (2015).

69. DoD, *Preventing Suicide*, recommendation 7.1

70. Levi-Belz et al., "Suicide Ideation," 199–200.

to promulgate research focused on the nuances between moral injury and PTSD in order to design and provide more adequate screening procedures for the military population. Furthermore, the Department should implement training and support mechanisms designed to address moral injury at multiple levels of command, not just in the mental health sector, in an effort to reduce suicidal ideation and the increasing rates of suicide in the military. **Æ**

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